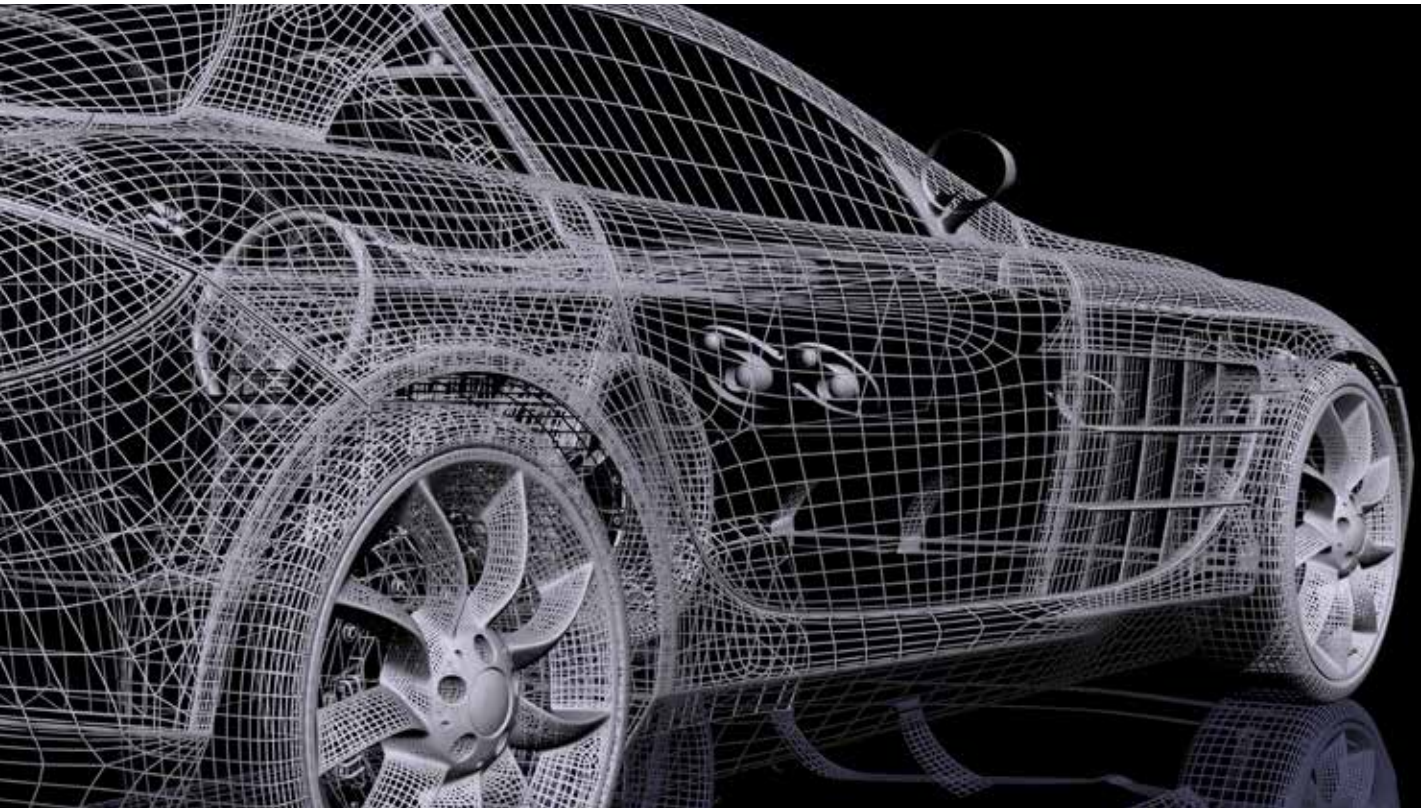


Automotive Industry in Kentucky



TEAM 
KENTUCKY
CABINET FOR ECONOMIC DEVELOPMENT



The Kentucky Effect

Kentucky—land of the thoroughbred—is widely known as the horse capital of the world. But Kentucky is also home to another type of horsepower. Kentucky is a driving force in today's auto industry. Companies have built vehicles in the Bluegrass State for generations, and they continue to succeed and grow to this day.

How large is the automotive industry in Kentucky? Its size and impact is dramatic. A statewide study by the Kentucky Automotive Industry Association shows its effect on Kentucky's overall economy, wages and workforce.

From assembling the most innovative cars and trucks on the planet to designing next generation engines and parts, it's clear Kentucky horses aren't alone in being ahead of the competition.

1 OUT OF EVERY 16
workers in the U.S.
automotive industry are
located in Kentucky.

Over the past 5 years,
KY's auto industry has
announced more than
\$10.8 B IN INVESTMENTS

525
automotive-related
businesses in Kentucky

#1 PER CAPITA
in the U.S. in
automotive production

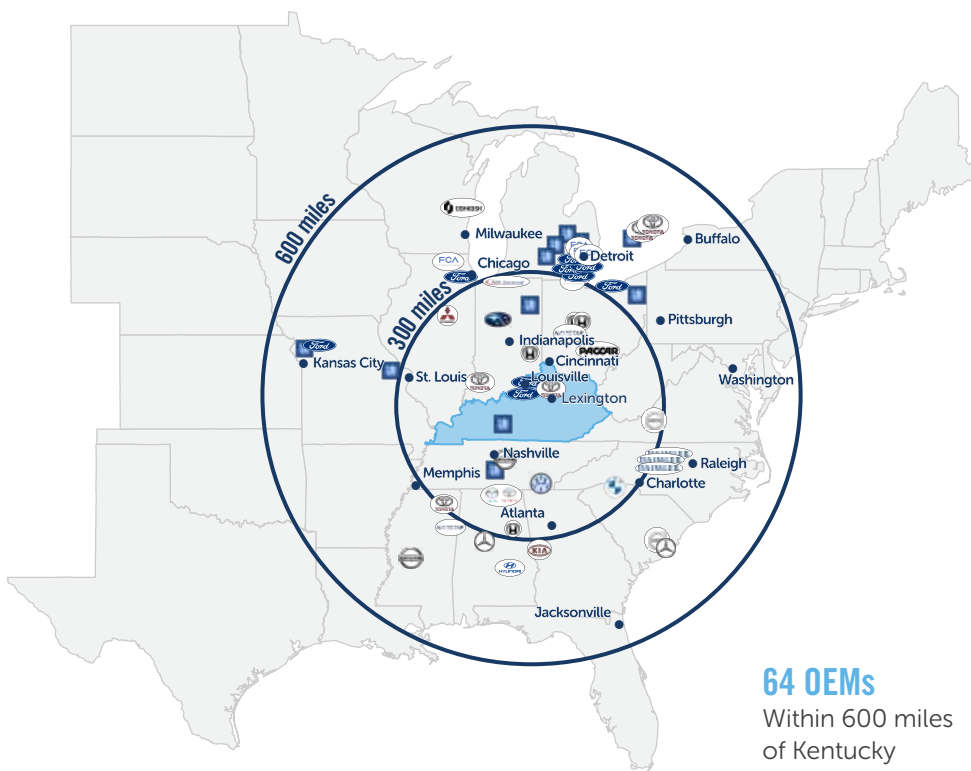
1 OUT OF EVERY \$11
in Kentucky's economy
is tied to the automotive
industry.

Over the past 5 years,
Kentucky's auto industry has
announced approximately
21,000 NEW JOBS

The Center of Auto Alley!

One of Kentucky's most undeniable assets is its location. Whether it's to another state or another continent, Kentucky has the capability to move products efficiently.

Located within a day's drive of more than two-thirds of the U.S. population, Kentucky provides businesses with superb access to markets and suppliers. Kentucky-made products can travel along 20 interstates and major highways, running through the heart of "Auto Alley."



"The Corvette's iconic status owes so much to the men and women of Bowling Green, where it has been built exclusively for almost 40 years."

Mary Barra
Chairman and CEO,
General Motors

Kentucky Horsepower

Kentucky is home to four automotive production facilities representing three OEMs. Ford operates two plants in Louisville, Toyota's largest production facility is located in Georgetown and General Motors constructs the famous Corvette in Bowling Green. In total, no one in the U.S. produces more vehicles per capita than the commonwealth.



Ford F-Series Super Duty

Made in Kentucky since 2006



Ford Expedition

Made in Kentucky since 2009



Ford Escape

Made in Kentucky since 2011



Lincoln Navigator

Made in Kentucky since 2009



Lincoln Corsair

Made in Kentucky since 2019



Toyota Camry

Made in Kentucky since 1988



Toyota Camry Hybrid

Made in Kentucky since 2006



Toyota Avalon

Made in Kentucky since 1994



Toyota Avalon Hybrid

Made in Kentucky since 2012



Toyota RAV4 Hybrid

Made in Kentucky since 2020



Lexus ES 350

Made in Kentucky since 2015



Lexus ES Hybrid

Made in Kentucky since 2019



Chevrolet Corvette

Made in Kentucky since 1981

6.4 MILLION+ VEHICLES

were produced in Kentucky over
the past five years

"In a way, for manufacturing, **Kentucky is Toyota's home.** It also has some of the most experienced Toyota team members in the world."

Akio Toyoda
President & CEO
Toyota

A Global Automotive Force

Kentucky has been making cars for more than a century, since Ford first rolled its Model T down a Louisville assembly line back in 1913. Henry Ford discovered what countless others would soon learn—Kentucky is a great place to build the world's best vehicles.

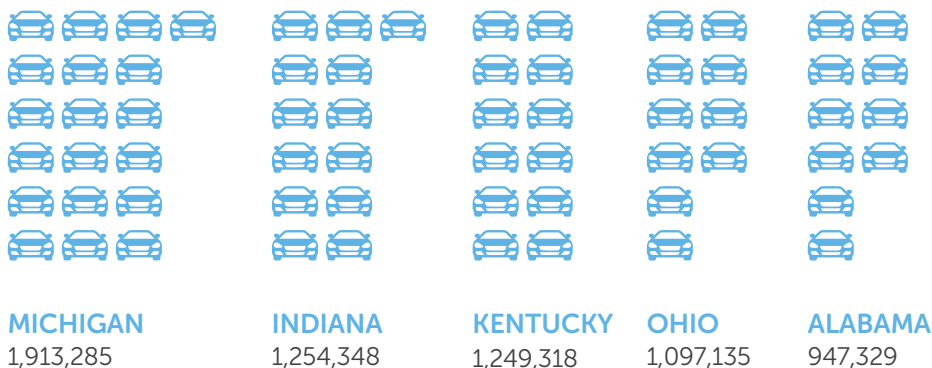
Today, Kentucky is at the center of advanced automotive manufacturing. Its four major assembly plants—Ford (two plants), General Motors and Toyota—have invested billions of dollars into their Kentucky operations and are designing, engineering and assembling the next generation of vehicles.

In fact, the commonwealth produced more than 6.4 million cars and trucks last year, making Kentucky the largest automotive-producing state per capita.

- ✓ Approximately 35% of all new investment and 24% of jobs announced in the past 5 years are a result of automotive-related projects.
- ✓ More than 100,000 directly employed in auto-related manufacturing and service & technology facilities.
- ✓ Nearly 200 international motor vehicle-related facilities, employ nearly 60,000 people.

Kentucky's Automotive Strength





Ranks 3rd in U.S. car and truck production

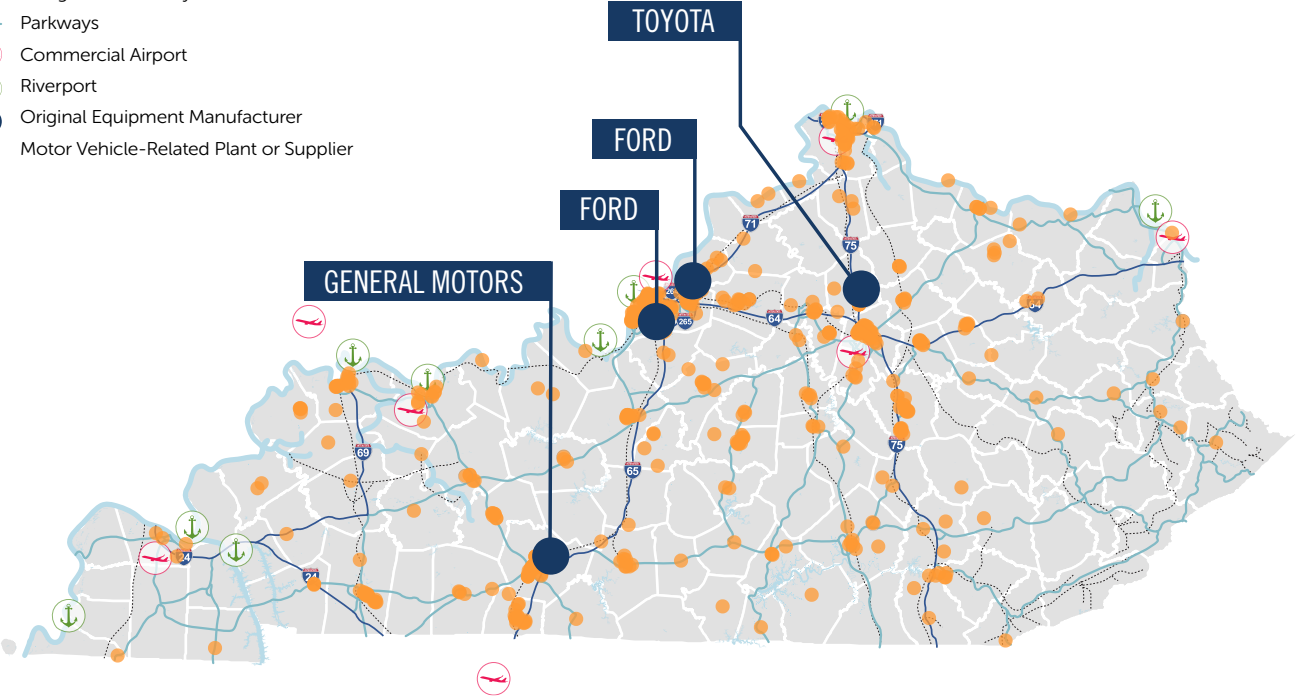


 = 100,000 Cars & Trucks

Motor Vehicle-Related Facilities in KY

KEY

- Class I Railway
- Interstate Highways
- Navigable Waterway
- Parkways
-  Commercial Airport
-  Riverport
-  Original Equipment Manufacturer
-  Motor Vehicle-Related Plant or Supplier



MANUFACTURING FACTS

Original Equipment Manufacturer Investments in the last 5 years (2015-2019)

FORD MOTOR COMPANY | \$2.9 Billion

TOYOTA | \$1.8 Billion

GENERAL MOTORS | \$773 Million

Supply Chain Central

Not only does Kentucky know how to manufacture vehicles; it can supply virtually every component that goes into building them. As the nation's OEMs continue to grow, more parts suppliers are locating and expanding in the state. Kentucky's supplier chain is one of the reasons the state's auto industry is so successful. More than 520 auto suppliers call Kentucky home. They make everything from bumpers to engine components to windshields to frames. These parts are shipped throughout the country and around the world.

Top 10 Automotive Employers

Based on full-time, statewide employment

1.	Ford Motor Company	14,960
2.	Toyota Motor Manufacturing Corp	9,066
3.	Metalsa Structural Products Inc	2,898
4.	Magna International Inc	2,655
5.	Hitachi Ltd	2,125
6.	Akebono Brake Industry Co Ltd	1,901
7.	Toyota Tsusho Corporation	1,847
8.	Dana Inc	1,733
9.	Toyoda Iron Works Co Ltd	1,520
10.	Adient	1,495



Source: Kentucky Cabinet for Economic Development, 2019

Top 10 Motor Vehicle Component Exports

1. Steering Wheels, Columns & Boxes
2. Parts & Accessories*
3. Brakes
4. Suspension Shock Absorbers
5. Mufflers And Exhaust Pipes
6. Road Wheels
7. Gear Boxes
8. Drive Axles
9. Safety Airbags
10. Bumpers & Parts

*Not elsewhere specified or classified (2019) Source: WISER Trade, U.S. Census Bureau



64 plastics facilities supply parts or services to the motor vehicle industry.



Kentucky has 11 motor vehicle brake system manufacturers.



9 Kentucky facilities supply steering and suspension components.



17 manufacturers of electrical + electronic equipment for motor vehicles.



Kentucky is home to 33 motor vehicle-related stamping facilities.



19 Kentucky companies make seating and interior trim.

State of Resources

KENTUCKY HAS THEM IN ABUNDANCE

As manufacturers implement such innovations as lightweighting, digital manufacturing techniques and fuel efficiency breakthroughs, Kentucky offers the resources to implement these technologies and to create the innovative practices of the future. Here are just a few of the examples that make Kentucky the place to put innovation into practice.



ALUMINUM

- ✓ Nearly 200 aluminum-related facilities with more than 20,000 full-time employees.

- ✓ Kentucky exported \$219 million worth of aluminum in 2019.



STEEL

- ✓ Steel in Kentucky is becoming lighter and stronger, expanding to include a lighter and high-strength variety.
- ✓ Kentucky has 43 steel and iron production companies, employing more than 6,400 full-time workers.
- ✓ Kentucky exported nearly \$300 million worth of iron and steel in 2019.



RUBBER + PLASTICS

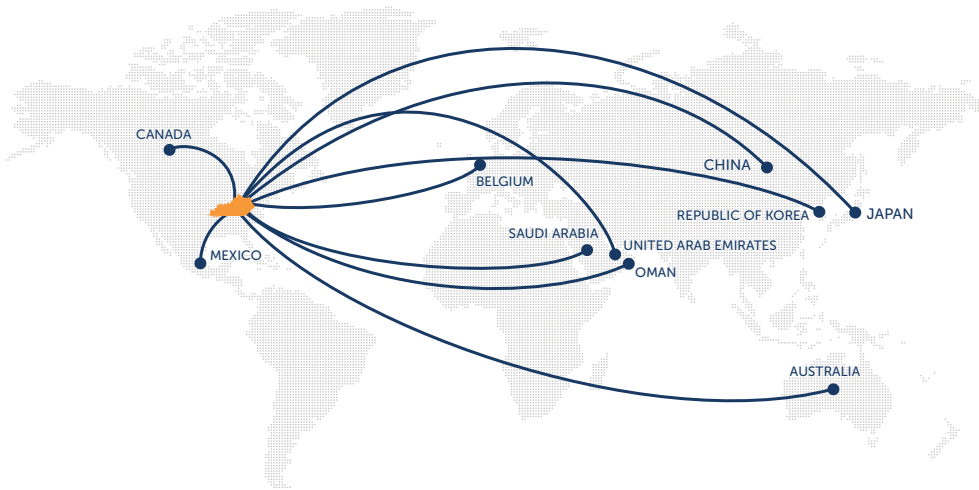
- ✓ Kentucky is home to 225 rubber and plastics manufacturers with nearly 30,000 full-time employees.
- ✓ In the past 5 years, Kentucky has experienced nearly 150 expansions.
- ✓ Kentucky exported more than \$410 million of rubber and plastics in 2019.

Exports

In addition to Kentucky's central US location, part of our logistics success lies in our ability to ship products anywhere in the world virtually overnight. Kentucky hosts global shipping hubs for three logistics giants - DHL, UPS and Amazon Air – plus several FedEx ground facilities. In addition, our extensive shipping network of interstates, rail and waterways guarantee fast shipping anywhere in the US.

Top 10 export destinations

Kentucky-made motor vehicle and parts products



In 2019, Kentucky exported:

\$2,835,857,528 | motor vehicles

\$1,391,370,470 | motor vehicle parts

\$371,286,309 | motor vehicle bodies and trailers

EXPORT FACTS

Vehicle and parts
exports in 2019 was

**NEARLY \$4.6
BILLION**

By dollar value,
motor vehicles
are the state's

**2ND LARGEST
EXPORT**

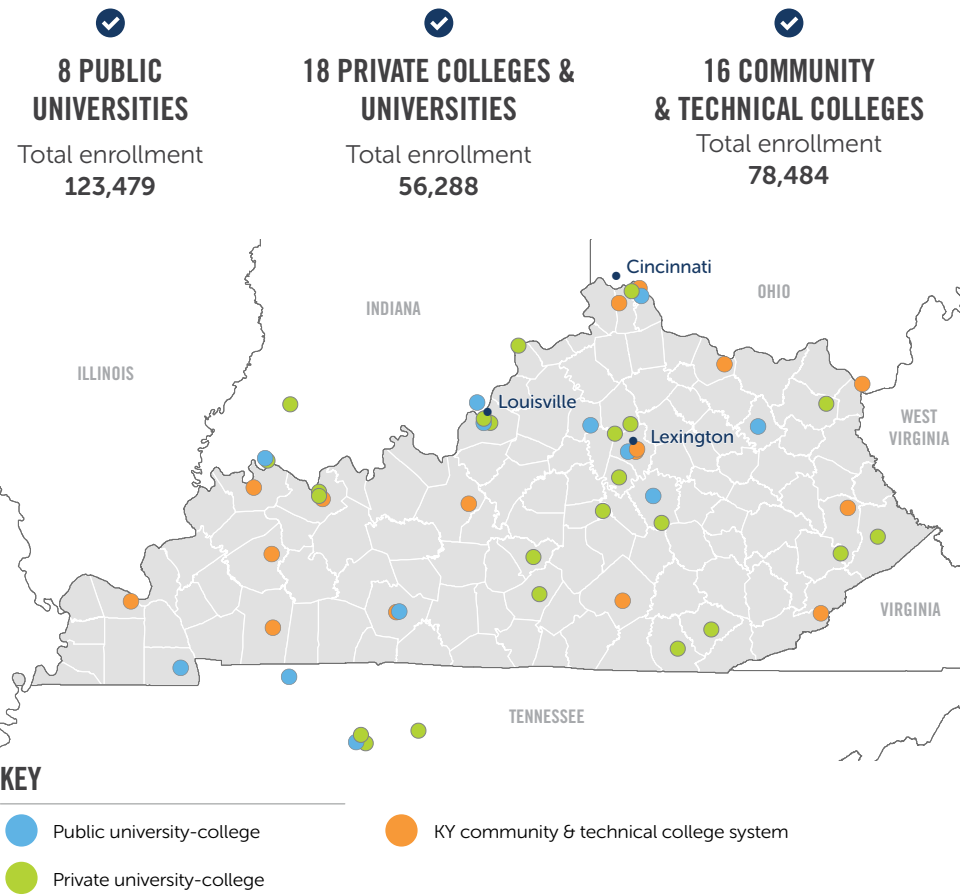
Motor vehicle-related
products are shipped
to more than

90 COUNTRIES

Revving up the Workforce

A highly skilled and available workforce is the engine that drives Kentucky's economy. Our statewide system of colleges and universities educates and trains our young people to enter the workforce more prepared than ever.

An abundance of engineering degree programs are available at Kentucky's colleges and universities, including specialized chemical, electrical, industrial, mechanical and materials engineering bachelor's and master's programs, as well as an engineering physics bachelor's program. Nine colleges and universities in Kentucky offer undergraduate engineering degrees and three also provide graduate programs, including an individualized engineering program. The University of Kentucky and University of Louisville also offer doctorate programs.



SKILLED WORKERS IN KENTUCKY

Title	Jobs
Assemblers and Fabricators	46,116
General and Operations Managers	28,599
Supervisors of Production Workers	11,906
Inspectors, Testers, etc.	10,811
Electricians	9,637
Welders, Cutters, Solderers, and Brazers	6,949
Machinists	6,390
Industrial Engineers	4,959
Production Workers	4,436
Mechanical Engineers	4,207
Industrial Production Managers	3,550
Computer-Controlled Machine Tool Operators	2,311
Tool and Die Makers	1,880

Source: Chmura Economics & Analytics/
JobsEQ, 2019 (Q3)

In addition, the Kentucky Community and Technical College System (KCTCS) offers a variety of manufacturing-specific academic programs that combine classroom instruction with practical experience. These include:

- Advanced Manufacturing Technician
- Computerized Manufacturing Machining
- Welding Technology
- Industrial Maintenance Technology
- Manufacturing Industrial Technology
- Additive Manufacturing
- Manufacturing Electrical Technology

Kentucky Skills Network

Once students are educated, the Kentucky Skills Network allows employers to find and train the best and most qualified workers through a customized and streamlined approach.

The Kentucky Skills Network is an innovative statewide system of workforce professionals who help employers recruit, hire and train employees for the careers of today and tomorrow. Kentucky Skills Network services include:

- No-cost recruitment and job placement services
- Customized training at reduced or no cost
- Training incentives for internal training needs
- Workforce preparation initiatives such as job placement assistance, apprenticeship-style education and community readiness programs
- Last year, the Kentucky Skills Network provided training to 84,000 Kentucky workers and assisted 5,600 companies.

Certifying the Workforce

Kentucky's communities are stepping up to the plate when it comes to demonstrating the quality of their workforce. The state's Work Ready Communities program – the most rigorous workforce certification program in the nation – is inspiring meaningful dialogue and action by community, education, government and business leaders across the commonwealth.

A Kentucky Work Ready Community certification is a measure of a county's workforce quality. It is an assurance to business and industry that the community is committed to providing the highly skilled workforce required in today's competitive global economy. There are two levels of certification – counties can apply to be a Kentucky Work Ready Community or a Kentucky Work Ready Community in Progress.



KENTUCKY
Work Ready
COMMUNITIES

43

Work Ready
Communities

52

Work Ready in
Progress

25

Communities with
letter of intent or in
formative stage



The certification measures high school graduation rates, National Career Readiness Certification completion, community commitment to workforce development, educational attainment, soft skills development, and internet accessibility. This initiative encourages counties to take a credible inventory of the current and future workforce, identify gaps and carry out strategies to achieve a more knowledgeable, trained workforce.

Three-fourths of Kentucky's counties already certified as either Work Ready or Work Ready in Progress, and the remainder of the state's counties in some stage of the journey, Kentucky is proving workforce preparedness is not just lip service.

Source: Kentucky Education & Workforce Development Cabinet

Workforce Training: A Program for Industry, by Industry

Imagine being able to train your future workforce while they're still in school. That's the KY FAME model.

The Kentucky Federation for Advanced Manufacturing Education (KY FAME) is an industry-led partnership that includes manufacturers, educational and workforce institutions and the Cabinet for Economic Development to create a pipeline of skilled workers.

KY FAME offers a dual-track, apprenticeship-style training program. Students attend classes two days per week at their local community and technical college and work three days a week for a sponsoring employer. Students completing the program receive an associate degree in applied science and real-world work experience. Armed with this unique skillset, they have the option of choosing to pursue a four-year degree, enter the workforce or continue down both paths.

KY FAME is growing rapidly. In just over a year, the program has grown to include more than 150 students and 125 companies, and several other regions of Kentucky are joining the program as KY FAME goes statewide.

- 125+ member companies
- 56 employer sponsors
- 10+ partner colleges
- 98% employed graduates

KYFAME

Energy Research in Kentucky

KENTUCKY HAS THEM IN ABUNDANCE

Conn Center for Renewable Energy Research

Determining solutions, through partnerships among colleges and universities, private industries, and non-profit organizations, for renewable energy challenges and creating further energy efficiencies

The center's research and development efforts are dedicated to seven renewable energy themes involving solar manufacturing, solar fuels, biofuels, energy storage, advance energy materials, materials characterization, and efficiency & conservation.

Recent grant recipient of \$500,000 to study the production of hydrogen fuels from water and sunlight.

Center for Applied Energy Research

Finding future technologies to solve today's fossil fuel challenges.

The center's research focuses on biofuels & environmental catalysis, clean fuels & chemicals, materials technologies, organic electronics, and power generation

Recipient of two federal grants (\$120.5 million), focused on next generation batteries and other energy sources.



Kentucky's Global Reach

Kentucky also provides an alternative for international shippers that have limited access to overly crowded ports on the east and west coasts. Bordered by three important commercially navigable rivers (the Ohio, Mississippi, and Big Sandy), and providing access to nine public riverport facilities, Kentucky offers an expedient two-way route between the inland markets of America's heartland and major ports on the Gulf of Mexico.

The bottom line is this. A product made in Kentucky can get anywhere in the world in a matter of hours.



Kentucky is located within a
**DAY'S DRIVE OF 2/3 OF
THE U.S. POPULATION**



Some of the nation's
LARGEST CITIES
are located within a
TWO-HOUR FLIGHT
of Kentucky



Kentucky is located at the
**CENTER OF A 34-STATE
DISTRIBUTION AREA**
in the Eastern U.S.



LOGISTICS FACTS

HIGHWAYS & BYWAYS

10 interstates + 10
state parkways

GLOBAL SHIPPING HUBS

UPS, DHL and Amazon
Prime

AIRPORTS

5 commercial, including
2 international and 60+
general aviation

WATERWAYS

Over 1,600 miles
of commercially
navigable waterways
11 active/developing
riverports

RAILROADS

3,200 miles of railroad
track including 2,600
miles of freight rail

FREIGHT

558 million tons
move across Kentucky
roadways in 2011



Logistics Leads the Way

In addition to our central US location, part of our logistics success lies in our ability to ship products anywhere in the world virtually overnight. Kentucky hosts global shipping hubs for three logistics giants - DHL, UPS and Amazon Air – plus several FedEx ground facilities. In addition, our extensive shipping network of interstates, rail and waterways guarantee fast shipping anywhere in the U.S.

AMAZON



64

planned daily flights



1.5M

packages
delivered daily

DHL



96

flights arrive &
land daily



95K

packages
processed daily

UPS



300+

flights arrive &
land daily



2M+

packages
processed daily



Manufacturing Strengths

Kentucky's expertise, workforce and personalized service are major factors in our ability to maintain and grow a prominent position in the manufacturing industry. In addition, our business costs can help a company's profits skyrocket.

Global companies have discovered the value of locating in Kentucky. Currently, more than 500 Kentucky manufacturing, service and technology-related businesses are internationally owned, representing 32 countries.

Kentucky ranks among the leading manufacturing states with 13% of its workforce in manufacturing, versus 8.5% nationally. A recent nationwide state-by-state comparison by Ball State University gives Kentucky an "A" ranking for both manufacturing and logistics industry health.



4,500

Manufacturing
facilities in Kentucky



\$3.94 BILLION

Manufacturing
projects announced
in 2019



260,000

Kentuckians
employed in
manufacturing



13%

Of Kentucky's
workforce employed
in manufacturing



71%

Of 2019 projects in
manufacturing



5,356

Manufacturing jobs
announced in 2019

Lowering the Cost of Doing Business

The commonwealth has consistently offered one of the lowest overall costs of doing business in the Eastern United States.

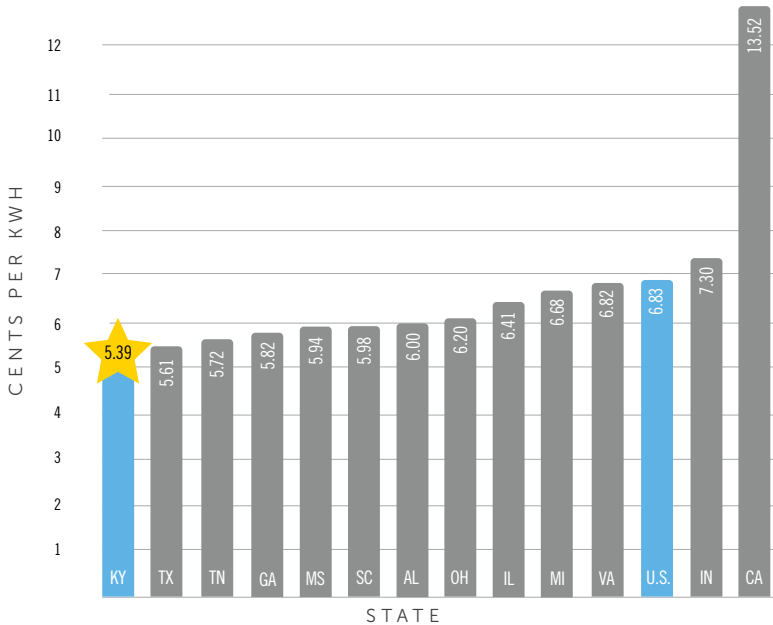
- No. 1 in the U.S. in lowest cost of doing business (CNBC).
- Kentucky's 1,900-plus miles of navigable waterways provide cost-effective shipping of bulk goods.
- Labor costs are 18% below the U.S. average (U.S. Bureau of Labor Statistics)

A Powerful Comparison

Kentucky's power costs also play a significant role in corporate growth. Our industrial electricity rates are the lowest east of the Mississippi River and among the lowest in the country.

INDUSTRIAL ELECTRICITY AVERAGE PRICE

Energy Information Admin., average price by state, released 2019



BUSINESS CLIMATE FACTS

"A" GRADE

Kentucky gets an "A" grade in manufacturing and logistics health
Center for Business and Economic Research

18.9% GROWTH

Kentucky's manufacturing share of total GDP (18.9%) has grown nearly twice the national average (11.7%) since 2010
U.S. Bureau of Economic Analysis

2ND LOWEST

Cost of living is the 2nd lowest in the nation
U.S. News & World Report



Site Options

Finding the perfect location in Kentucky to start, relocate or grow a business is easy. From existing buildings to greenfield sites to megasites, we can accommodate companies of all shapes and sizes—and on any timetable. Need a pad, spec building or an existing facility? Kentucky has plenty of options all across the state from which to choose. Here are a few of Kentucky's special features:

Build-Ready

When a site is certified Build-Ready, it guarantees construction can bypass the red tape and break ground almost immediately. Communities that participate in the program already have a pad prepared and have taken care of such details as zoning, road surveys, geotechnical studies, permitting and cost and time estimates. Build-Ready drastically reduces the time it takes for a company to be operational and also allows communities to incorporate the specific needs of the company. For the latest list of Build-Ready sites, visit BuildReadyKY.com

Kentucky Opportunity Zones - KY OZ

Kentucky is one of the first states to adopt the federal government's Opportunity Zone program. In Kentucky, 144 sites have been certified, meaning companies interested in locating or expanding in those specific areas have access to federal tax breaks.



Kentucky Will Help You Succeed

SUPPORT FOR GROWING BUSINESSES

Here in the commonwealth, we offer all of the resources a business needs to get started and to thrive for years to come.

Any company looking to locate or expand in Kentucky is sure to find the facilities, suppliers and partnerships needed to ensure long-term success. As the auto industry continues to evolve, so too will Kentucky. That evolution will ensure Kentucky remains a national leader in the auto industry well into the future.

SPEEDY APPROVAL

As your partner, here are some of the services we will provide:

- Speedy approval processes
- Site evaluation assistance
- Detailed location data
- Assistance with site visits
- Financial incentives and training inducements
- Talent recruitment and training
- Assistance obtaining required permits and licenses
- Serving as your advocate with all involved agencies
- Growing our ecosystem around your business with connecting suppliers

SITE & LOCATION ASSISTANCE

FINANCIAL INCENTIVES

WORKFORCE ASSISTANCE

ADVOCATE ON YOUR BEHALF

We are happy to support you through the entire decision-making process, and we continue that service even after you choose Kentucky.

Consider Kentucky as your partner in your growth plans. We stand ready to assist in any way to make your next venture a profitable one.

Please feel free to reach out to us at any time:

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